INDEPENDENCE MALL WEST PHILADELPHIA, PA. 19105, U.S.A. TELEPHONE (215) 592-3000
CABLE ADDRESS: ROHMHAAS TELEX 645-247

REPLY TO:
ENVIRONMENTAL CONTROL DEPARTMENT
BOX 584
BRISTOL, PA. 19007
(215) 785-7000

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135323

ROHM HAAS COMPANY

January 15, 1976

Mr. James V. Donato, Chief
Facilities Section
Harrisburg Regional Office
Department of Environmental Resources
Room 1002
Health and Welfare Building
Harrisburg, PA 17120

Dear Mr. Donato:

Re: Industrial Wastes Application No. 3975202
Whitmoyer Laboratories, Jackson Township, Lebanon County

Thank you for your letter of December 31. We are glad to know that the 5°F rise above ambient will be allowed in Whitmoyer's permit. On receipt of the permit, we shall establish the new No. 10 monitoring point as described in my letter of December 23. A minimum of a daily reading of the No. 5 and No. 10 temperatures will be made when the plant is discharging cooling water.

The following will confirm our telephone conversation of January 14, 1976.

In reply to point No. 4 of your letter, we do not expect to exceed a 5°F rise between Station No. 10 and Station No. 5 at any time with the cooling water discharging directly to the canal. Accordingly, we are not providing any means of reducing the temperature of the cooling water before it is discharged. You agreed that, under this condition, no changes are required on Module 27-2.

For No. 5 of your letter, I enclose a new Module 27-1, with Item A-2 corrected and an attachment describing the operation as an answer to Item A-4. You agreed this should be sufficient under the circumstances.

For your No. 6, I enclose a corrected Module 4-1, also with an attachment as we agreed. The values on Module 4-2 are correct as you have them.

We discussed sampling the effluent for arsenic. This is being done routinely as required by our NPDES permit: once per month on an eight-hour composite. Whitmoyer also takes samples once a month from the Tulpehocken Creek at four places between their plant and the Schuylkill River, plus two samples

from the Schuylkill. There is a long record of this information available which shows that the Tulpehocken stays well below the 0.05 mg/l required for drinking water from Womelsdorf on downstream.

I trust that you now have all the information you need to issue this discharge permit.

Very truly yours,

Duane G. Clarke

Duane G. Clarke

DGC:aem

cc: Mr. Paul Weber - DRBC
Mr. Frantz Dengler - Whitmoyer Laboratories

bcc: Mr. W. M. Huffman
Mr. F. C. Moesel
Mr. S. S. Palst
Mr. F. R. Robertson
File (2)

FM 710 946.27

DATE PREPARED
March 18, 1975
DATE REVISED
Jan. 15, 1976

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
WATER QUALITY MANAGEMENT

WATER POLLUTION CONTROL

MODULE 27 – HEATED WASTES

For Department Use Only

A. GENERAL INFORMATION

1. NAME OF RECEIVING ☒ Stream ☐ Lake ☐ Estuary Tulpehocken Creek

2. AT THE POINT OF DISCHARGE, WHAT WATER TEMPERATURE CRITERION APPLIES:
   - ☒ (d_1) MAXIMUM OF 58° F (Trout propagation stream)
   - ☐ (d_2) MAXIMUM OF 87°F
   - ☐ (d_3) MAXIMUM OF 86° F (Delaware Estuary)
   - ☐ (d_6) MAXIMUM OF 74° F FEB. 15 TO JULY 31, OTHERWISE 87°F, (Trout stocking stream)

3. WILL THE TEMPERATURE OF THE STREAM, AFTER MIXING, AT ANY TIME BE RAISED MORE THAN 5 DEGREES FAHRENHEIT BY THE HEATED DISCHARGE? (This requirement may be more restrictive at lower stream temperatures) ☐ Yes ☒ No

4. HEAT IN THE WASTE WATER ABOVE THE SPECIFIED TEMPERATURE TO BE REJECTED TO THE STREAM IS variable BTU/HR. (If zero, no further information required on this sheet). See att.

5. AT THE POINT OF DISCHARGE:

   A. THE MINIMUM 7-DAY, ONCE-IN-10-YEAR FLOW IS _____ cfs (See Module 2, Page 5)

   B. THE STREAM WIDTH AT THAT FLOW IS _____ FEET.

   C. THE AVERAGE STREAM DEPTH AT THAT FLOW IS _____ FEET.

6. AT THE ABOVE DESCRIBED MINIMUM FLOW:

   A. THE AVERAGE STREAM TEMPERATURE AT THE POINT OF DISCHARGE IS _____ DEGREES FAHRENHEIT.

   (Specify source of this value) _____

   B. THE STREAM WILL ABSORB _____ BTU/HR IN ORDER FOR ITS TEMPERATURE TO BE RAISED TO THE APPLICABLE TEMPERATURE CRITERION MAXIMUM.

7. THE HEAT ABSORBING CAPACITY OF THE STREAM SO AS NOT TO EXCEED THE SPECIFIED TEMPERATURE MAY BE AT A MINIMUM AT A TIME OTHER THAN THE PERIOD OF LOW FLOW. FOR EXAMPLE:

   A. THE MAXIMUM STREAM TEMPENATURE OF RECORD IS _____ DEGREES FAHRENHEIT.

   B. AT THIS TEMPERATURE, THE FLOW WAS _____ cfs.

   C. UNDER THESE CONDITIONS, THE STREAM WILL ABSORB _____ BTU/HR IN ORDER FOR ITS TEMPERATURE TO BE RAISED TO THE APPLICABLE TEMPERATURE CRITERION MAXIMUM.

8. SELECT, BETWEEN ITEMS 5 AND 6 ABOVE, WHICH HEAT ABSORBING CAPACITY IS LESS, OR OTHER COMBINATION OF FLOW AND TEMPERATURE KNOWN TO BE MORE CRITICAL.

   FLOW _____ cfs. TEMP. _____ Degrees Fahrenheit. HEAT ABSORBING CAPACITY _____ BTU/HR.

9. AT THE MOST CRITICAL CONDITION, THE TEMPERATURE OF WASTES AND THE RECEIVING STREAM, AFTER COMPLETE MIXING, WILL BE _____ DEGREES FAHRENHEIT.

10. PROVIDE SKETCH OF MIXING ZONE WITHIN WHICH THE ALLOWABLE TEMPERATURE WILL BE EXCEEDED.

    A. THE ESTIMATED LENGTH OF MIXING ZONE REQUIRED TO ACHIEVE COMPLETE MIXING IS _____ FEET.

    B. THE WIDTH OF THE MIXING ZONE WILL BE _____ FEET.

    C. IF DISCHARGE IS EXISTING, PROVIDE ACTUAL TEMPERATURE DATA.

AR100246

AR100246

Industrial Wastes Application No. 3975202
Whitmoyer Laboratories
Jackson Township
Lebanon County, PA

Attachment to Module 27-1 see letter of James V. Donato, P.E., to D. G. Clarke, December 31, 1975.

A.4. Heat in the wastewater above the temperature criterion checked in Item 2 is variable and intermittant. The following range was measured in 1975:

Minimum 6944 BTU/hr.
Average 49468 BTU/hr.
Maximum 177,330 BTU/hr.

It is quite possible that Whitmoyer Laboratories may install a process which will produce more heat than this. However, there is no expectation that the stream temperature will be increased more than 5°F at monitoring point No. 5, with the ambient measured at point No. 10.

Mr. Donato stated in a telephone conversation that, in view of the variable nature of the discharge, it will not be necessary to complete Module 27-1 beyond Item A-4 and this attachment.

ER710.048.4

DATE PREPARED: 5-5-75
DATE REVISED: 8-26-75 1/15/76

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
WATER QUALITY MANAGEMENT

WATER POLLUTION CONTROL

For Department Use Only

MODULE 4 – WASTE LOAD AND CHARACTERISTICS

TABLE I – WASTE STATUS REPORT

TOTAL WASTE FLOW (MGD)				SOURCE OF WASTE:	SOURCE OF WASTE:	SOURCE OF WASTE:	SOURCE OF WASTE:
Min.=0.0345 Max.=0.72 See attachment can be intermittent at times				Tulpehocken Creek & city water			
				[X] PRESENT [ ] FUTURE	[ ] PRESENT [ ] FUTURE	[ ] PRESENT [ ] FUTURE	[ ] PRESENT [ ] FUTURE
1. TYPE OF WASTE				cooling water			
2. FLOW	A. MGD (AVERAGE)			.14			
	B. MGD (MAXIMUM)			.72 intermittent			
3. WASTE DISCHARGE	A. TREATED SEPARATELY			No treatment			
	B. NOT TREATED	EXISTING	PROPOSED	X			
	C. COMBINED AND TREATED			No Treatment			
4. SEQUENCE OF TREATMENT STEPS				No Treatment			
				No Treatment			
				No Treatment			
				No Treatment			
				No Treatment			
				No Treatment			
				No Treatment			

A. GENERAL INFORMATION

1. WILL ALL LABORATORY ANALYSES BE IN ACCORDANCE WITH THE LATEST EDITION OF "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER"? [X] Yes [ ] No [ ] N/A

2. WILL THE TREATMENT PROCESS PRODUCE FOR EACH WASTE ABOVE A SATISFACTORY EFFLUENT THAT WILL HAVE NO ADVERSE EFFECT UPON THE RECEIVING STREAM OR ITS USES? [ ] Yes [ ] No [X] N/A

ONLY SEWERAGE AND INDUSTRIAL WASTE APPLICANTS COMPLETE ITEM 3.

3. GIVE EXPECTED PERCENTAGE REDUCTION OF:

A. BOD (5 DAY 20° CENTIGRADE) Not Affected % [ ]

B. SUSPENDED SOLIDS Not Affected % [ ]

C. SETTLEABLE SOLIDS (SEWAGE ONLY) Not Affected % [ ]

AR100248

AR100248

Industrial Wastes Application No. 3875202
Whitmoyer Laboratories
Jackson Township
Lebanon County, PA

Attachment to Module 4-1 see letter of James V. Donato, P.E., to D. G. Clarke, December 31, 1975.

The total waste flow will be variable and intermittent, depending upon demand. The minimum of 0.0345 MGD and maximum of 0.72 MGD given on Module 4-1 are from 1975 operation. There is a distinct possibility that Whitmoyer Laboratories may discharge more cooling water on a variable and intermittent basis during the life of the permit. There is no expectation, however, that the heat content will be sufficient to increase the creek temperature by more than 5°F.